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EXTENSION OF TIME

Please find enclosed a Patents Form SB022 for a petition requesting an extension of time of 2 months. We also enclose a Credit Card payment form (PTO-2038) for payment of the requisite extension fee of \$245.00 (small entity)

LISTING OF THE CLAIMS

AMENDMENTS TO THE CLAIMS

Please amend the following of the claims which are pending in the present application:

1. (Currently amended) A wire-strike system including:
a non-explosive wire cutter including at least one pair of electrodes, electrically insulated from each other and mounted to an outer surface of an aircraft, said electrodes being connectable to a power source capable of generating an electrical potential difference between the electrodes and in the event of a wire-strike, supplying a short-circuit current flow through a portion of said wire connecting both electrodes.
2. (Original) A system as claimed in claim 1, wherein said electrodes are attached to an electrically insulated mounting base portion.
3. (Original) A system as claimed in claim 2, wherein said base portion and electrodes are formed as an elongated strip, wherein the electrodes are elongated and located adjacent, but spaced apart from each other.

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Application No. 10/576,903

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Examiner: Kreiner, M.
Group Art Unit: 4174

4. (Previously presented) A system as claimed in claim 1, wherein a pair of electrodes ~~[[is]]~~ are orientated substantially parallel to each other.
5. (Previously presented) A system as claimed in claim 1, wherein at least one pair of said wire cutter electrodes are formed as an entrapment element, capable of guiding a wire, for severing, into an intersection between convergent deflector portions located either side thereof.
6. (Original) A system as claimed in claim 5, wherein said intersection is notched.
7. (Previously presented) A system as claimed in claim 5, wherein electrodes located on said deflector portions and/or said intersection are formed with an outward cutting edge.
8. (Previously presented) A system as claimed in claim 5, wherein electrodes of opposing polarity are positioned on opposing sides of said intersection.
9. (Previously presented) A system as claimed in claim 1, wherein said wire cutter includes a plurality of electrode pairs, independently energisable by said power source.
10. (Original) A system as claimed in claim 9, wherein said plurality of electrode pairs are capable of being simultaneously energised.
11. (Original) A system as claimed in claim 9 wherein said plurality of electrode pairs are capable of being selectively energised.

12. (Original) A system as claimed in claim 11, further including sensing and control means for sensing the proximity of a wire and selectively energising an electrode pair closest the wire.

13. (Previously presented) A system as claimed in claim 11, wherein said proximity sensing means including capacitive or inductive sensors.

14. (Previously presented) A system as claimed in claim 1, wherein the wire cutter electrodes may be formed as a series of substantially equidistant, parallel conductors of alternately opposing electrical polarity.

15. (Previously presented) A system as claimed in claim 1, wherein said electrodes are provided with a rupturable, non-conductive coating or film.

16. (Previously presented) A system as claimed in claim 1, further including an electrical power source and electrical connections between said power source and the or each at least one pair of wire cutter electrodes.

17. (Original) An aircraft provided with a wire-strike system as claimed in claim 1.

18. (Currently Amended) An aircraft provided with a wire-strike system including:

- a non-explosive wire cutter including at least one pair of electrodes, electrically insulated from each other and mounted upon an outer surface of the aircraft, said electrodes being connected to a power source capable of generating an electrical potential difference between the electrodes and in the event of a wire-strike, supplying a short-circuit current flow through a portion of said wire connecting both electrodes;

- an electrical power source, and
- electrical connections between said power source and the ~~or each~~ at least one pair of wire cutter electrodes.

19. (Original) An aircraft as claimed in claim 18, wherein said electrodes are attached to an electrically insulated mounting base portion.

20. (Original) An aircraft as claimed in claim 19, wherein said base portion and electrodes are formed as an elongated strip, wherein the electrodes are elongated and located adjacent, but spaced apart from each other.

21. (Previously presented) An aircraft as claimed in claim 17, wherein said electrodes are fixed directly to electrically non-conductive portions of the aircraft's surface.

22. (Previously presented) An aircraft as claimed in claim 17, wherein said wire cutter electrodes are positioned on one or more leading surfaces of an aircraft.

23. (Previously presented) An aircraft as claimed in claim 17, wherein said at least one pair of said wire cutter electrodes are formed as an entrapment element, capable of guiding a wire for severing into an intersection between convergent deflector portions located either side thereof, said entrapment elements being positioned at one or more entrapment positions about the aircraft's surface.

24. (Previously presented) An aircraft as claimed in claim 17, wherein said wire cutter includes a plurality of electrode pairs, independently energisable by said power

source.

25. (Original) An aircraft as claimed in claim 24, further including sensing and control means for sensing the proximity of a wire and selectively energising an electrode pair closest the wire.

26. (Currently Amended) A method of severing a wire impacting an aircraft in a wire-strike, using a system including:

a non-explosive wire cutter including at least one pair of electrodes, electrically insulated from each other and mountable upon an outer surface of an aircraft, said electrodes being connected to an electrical power source, said method including:

- generating an electrical potential difference between the elements;
- and in the event of a wire-strike, supplying a short-circuit current flow through a portion of said wire connecting both elements; and
- heating said portion of said wire with the short circuit current flow connecting both elements until said wire at least partially melts and severs.